



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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APR 11 2016

Mr. Gary D. Goeke  
Chief, Environmental Assessment Section  
Leasing and Environment (MS 5410)  
Bureau of Ocean Energy Management (BOEM)  
1201 Elmwood Park Boulevard  
New Orleans, Louisiana 70133-2394

Re: EPA NEPA Review Comments on BOEM's DSEIS for "Gulf of Mexico Outer Continental Shelf (OCS) Oil and Gas Lease Sales: 2017 Central Planning Area Lease Sale 247"; CEQ #20160044

Dear Mr. Goeke:

The U.S. Environmental Protection Agency has reviewed the subject Bureau of Ocean Energy Management (BOEM) Draft Supplemental Environmental Impact Statement (DSEIS) in accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. It is our understanding that BOEM proposes a lease sale in the Gulf of Mexico (GOM) Outer Continental Shelf (OCS) for lease block 247 in the Central Planning Area. The EPA understands that this DSEIS addresses one proposed OCS lease sale 247 in the Central Planning Area (CPA) and that this EIS updates the baseline conditions and potential environmental effects of oil and gas activities since the publication of several previous BOEM lease sale EISs<sup>1</sup>.

The EPA has participated in several recent NEPA reviews for BOEM actions, including reviews of the Draft Programmatic Environmental Impact Statement (PEIS) for the proposed 2012-2017 Outer Continental Shelf Oil and Gas Leasing Program and the 2012-2017 WPA/CPA Multi-sale EIS and CPA 241/247/235 EISs. The EPA Region 4 and Region 6 have also entered into a cooperating agency agreement with BOEM on the Multi-sale EIS for the 2017-2022 proposed oil and gas lease sales in the GOM OCS.

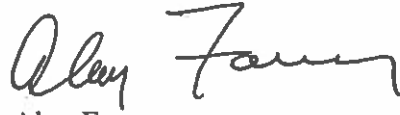
Based on our analysis of the above referenced proposed action, the EPA rates this DSEIS as "EC-2", i.e., "the EPA has environmental concerns and requests additional information" in the Final Supplemental EIS (FSEIS). The EPA's rating system criteria can be found online at: <http://www.epa.gov/oecaerth/NEPA/comments/ratings.html>. Our primary concerns associated with the proposed actions are related to potential impacts to air quality, coastal ecosystems, wetlands, and mitigation. Detailed technical comments are enclosed with this letter which more clearly identifies our concerns and comments. We request that the FSEIS include specific responses to our comments.

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<sup>1</sup> Abstract - DSEIS

Should you or BOEM staff have questions regarding our comments, please feel free to contact Dan Holliman, of my staff, at 404/562-9531 or [holliman.daniel@epa.gov](mailto:holliman.daniel@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Farmer". The signature is fluid and cursive, with the first name "Alan" and last name "Farmer" clearly distinguishable.

G. Alan Farmer  
Director

Resource Conservation and Restoration Division

Enclosures

**DETAILED TECHNICAL COMMENTS ON THE DRAFT SUPPLEMENTAL  
ENVIRONMENTAL IMPACT STATEMENT (DSEIS) FOR THE U.S. DEPARTMENT OF THE  
INTERIOR, BUREAU OF OCEAN ENERGY MANAGEMENT (BOEM) GULF OF MEXICO  
OUTER CONTINENTAL SHELF (OCS) OIL AND GAS LEASE SALE 247 CENTRAL  
PLANNING AREA CEQ NO.: 20160044**

**BACKGROUND:**

The Draft Supplemental Environmental Impact Statement (DSEIS) was prepared by the U.S. Department of the Interior, Bureau of Ocean Energy Management (BOEM) Gulf of Mexico (GOM) Outer Continental Shelf (OCS) Region for lease area 247 in the Central Planning Area (CPA). The EPA understands that this EIS supplements information covered in the following past NEPA documents: *Gulf of Mexico OCS Oil and Gas Lease Sales: 2012-2017; Western Planning Area Lease Sales 229, 233, 238, 246, and 248; Central Planning Area Lease Sales 227, 231, 235, 241, and 247, Final Environmental Impact Statement (2012-2017 WPA/CPA Multi-sale EIS) and Gulf of Mexico OCS Oil and Gas Lease Sales: 2013-2014; Western Planning Area Lease Sale 233; Central Planning Area Lease Sale 231, Final Supplemental Environmental Impact Statement (WPA 233/CPA 231 Supplemental EIS); Gulf of Mexico OCS Oil and Gas Lease Sales: 2015-2017; Central Planning Area Lease Sales 235, 241, and 247, Final Supplemental Environmental Impact Statement (CPA 235/241/247 Supplemental EIS); and Gulf of Mexico Oil and Gas Lease Sales: 2016 and 2017; Central Planning Area Lease Sales 241 and 247; Eastern Planning Area Lease Sale 226, Final Supplemental Environmental Impact Statement (CPA 241/247 and EPA 226 Supplemental EIS)*. The EPA provided review comments on these previous BOEM EISs in accordance with our responsibilities under Section 102(2)(C) of NEPA and Section 309 of the Clean Air Act.

**ALTERNATIVES PROPOSED:**

*Alternatives for Proposed Central Planning Area Lease Sale 247<sup>2</sup>*

- *Alternative A—The Proposed Action (Preferred Alternative):* This alternative would offer for lease all unleased blocks within the proposed CPA lease sale area for oil and gas operations with the following exceptions:
  1. Whole and portions of blocks deferred by the Gulf of Mexico Energy Security Act of 2006; and
  2. Blocks that are adjacent to or beyond the United States' Exclusive Economic Zone in the area known as the northern portion of the Eastern Gap.
- *Alternative B - The Proposed Action Excluding the Blocks Near Biologically Sensitive Topographic Features:* This alternative would offer for lease all unleased blocks within the proposed CPA lease sale area, as described for the proposed action (Alternative A), but it would exclude from leasing any unleased blocks subject to the Topographic Features Stipulation.
- *Alternative C - No Action:* This alternative is the cancellation of a proposed CPA lease sale.

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<sup>2</sup> Alternatives section cited directly from p. ix in DSEIS

## AIR QUALITY

The EPA is responsible for ensuring compliance with the National Ambient Air Quality Standards (NAAQS) in the Gulf States of Texas, Louisiana, Mississippi, Alabama and Florida. In addition, EPA Region 4 is responsible for implementing and enforcing Clean Air Act (CAA) requirements for OCS sources offshore the state seaward boundaries of all areas of the Gulf of Mexico (GOM) east of 87°30" (see CAA section 328). Pursuant to the CAA and applicable federal regulations (see 40 CFR 55), OCS activities, such as exploratory drilling operations and production platforms are subject to the EPA requirements to obtain air quality preconstruction and operating permits.

The air quality sections of the above referenced DSEIS were reviewed by the EPA Region 4 Air, Pesticides, and Toxics Management Division (APTMD). The air quality analysis incorporates by reference the air quality analysis in the 2012-2017 WPA/CPA Multi-sale EIS and other updated supplemental EIS documents, including the WPA 233 and CPA 231 Supplemental EIS, the CPA 235/241/247 Supplemental EIS, and the CPA 241/247 and EPA 226 Supplemental EIS. BOEM has re-examined the analysis for air quality since these documents were prepared and has determined that no new significant information was discovered that would alter previous impact conclusions for air quality. Likewise, our concerns remain essentially unchanged from our March 2015 and October 2015 air quality comments, including the following, which are summarized below:

- The referenced analyses predict modeled emission results above the EPA significant impact level (SIL) for the annual NO<sub>2</sub> standard and the standard for 24-hour particulate matter of 2.5 microns or less (PM<sub>2.5</sub>). The EPA continues to recommend that exceedance of a SIL warrants more refined analysis be conducted to validate the BOEM conclusions that the proposed actions are projected to have minimal air quality impacts.
- The EPA continues to have concerns that emissions from the activities of well stimulation vessels are not included in the air quality impacts analysis. The BOEM indicated they would be including well stimulation activity in the 2014 emissions inventory. Consistent with BOEM's stated objective of providing updated information in this supplemental EIS, and given that the lease sale will result in drilling wells into the next decade, the EPA recommends that air quality analyses include all emissions activities currently in use and expected to result from the 2017 lease sales.
- The EPA continues to recommend that BOEM develop measures to monitor and mitigate NAAQS pollutants, such as NO<sub>x</sub>, and PM<sub>2.5</sub>, as well as, greenhouse gases, and to include recommendations for these measures in the final EIS and Record of Decision (ROD). The EPA suggests that reasonable mitigation measures that should be considered include: the use of low sulfur fuels, including liquefied natural gas; inherently lower polluting engine designs; use of tier certified non-road and marine engines (prohibiting the use of engines intended for export), and electrification of cranes and support equipment. The EPA also encourages the BOEM to include provisions for periodic or continuous emissions monitoring for all large emission units to ensure that emissions are maintained below the exemption thresholds, and hence, ensure compliance with the NAAQS and the Coastal Zone Management Act (CZMA).
- The EPA continues to believe that the transport distances used in the incorporated air quality analyses are beyond the stated reliable limits of the Offshore Coastal Dispersion model. The BOEM's February 12, 2016, response to our comments indicates that AERMOD-AERCOARE approach is being evaluated for use in the Gulf of Mexico. While AERMOD-AERCOARE has

advantages when offshore meta-data is not available, such as in the Arctic, this model is also not designed for long-range transport.

- The EPA continues to recommend that the BOEM include receptors at the state seaward boundary to ensure that the NAAQS are protected and that the air quality within this area is not adversely impacted by OCS activity. The EIS serves as a document to allow decision makers to discern compliance with applicable statutes and regulations, including the requirements of the Outer Continental Shelf Lands Act (OCSLA), the CAA, the CZMA, and the NAAQS within state seaward boundaries. As indicated in our previous comments, this near-shore area is subject to state attainment planning, is the area located closest to the lease sale blocks, and is an area of human activity, including recreational and commercial boating and fishing. Hence, information from the BOEM regarding the impacts at the states seaward boundary is critical for the states to ensure this near shore area is in compliance with the NAAQS, as well as with the CZMA. In addition, the OCSLA refers to impacts on “the air quality of any State”. The state jurisdiction extends, by statute, to the state seaward boundary (3 or 9 miles from the shore).

In addition, we have the following recommendations to specific sections of the DSEIS:

- The accidental release of hydrocarbons discussed on page 4-9 identifies both the substances and the emissions produced during a release and a fire. The EPA recommends that this discussion also indicate that emissions of greenhouse gases and hazardous air pollutants that would also likely form during these events.
- The DSEIS concludes that non-OCS oil and gas related activities produce greater emissions than comparable OCS activities, and thereby, represent the majority of the cumulative impacts onshore, page 4-10. This statement does not contain a reference to specific emission inventories or studies. The EPA recommends that the BOEM include the relevant citation(s) in future NEPA documents.

## **NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PROGRAM**

The EPA notes that Section 3.1.1.3 includes information on the National Pollution Discharge Elimination System (NPDES) program and permit limits established under this program. Specifically, it is stated on page 3-10 that NPDES: “permits place limitations on the toxicity of all effluents, as well as other requirements for monitoring and reporting”. The EPA notes that it is inaccurate to state that all effluents will have permit toxicity limits. For example, no toxicity testing is required for deck drainage, domestic wastewater, and sanitary wastewater. The current EPA Region 4 NPDES general permit includes best conventional pollutant control technology, and best available technology economically achievable limitations for existing sources and new source performance standards limitations for new sources as promulgated in the effluent guidelines for the offshore subcategory. For select wastewater streams, stricter requirements apply based on the best professional judgment of the permit writer.

**Recommendation:** The EPA Region 4 recommends that the FSEIS be revised to include the above clarification related to effluent toxicity permit limits. In addition, the EPA Region 4 would like to also bring to BOEM’s attention that a newly proposed NPDES general permit for OCS activities in our jurisdiction area will be available for public review and comment in the near future. The proposed reissuance of this NPDES permit covers existing and new source facilities located on Federal leases occurring in water depths seaward of 200 meters, occurring offshore the coasts of Alabama and Florida. The western boundary of the coverage area is demarcated by Mobile and Visoca Knoll lease blocks located seaward of the outer boundary of the territorial seas from the coasts of Mississippi and Alabama.

The EPA anticipates that the proposed NPDES permit will establish limitations on the amounts of pollutants allowed to be discharged and will be drafted in accordance with the provisions of the Clean Water Act and other lawful standards and regulations. Specifically, the EPA anticipates that the proposed EPA Region 4 NPDES general permit will include a preferred alternative that whole effluent toxicity testing requirements apply for produced water, well treatment completion and workover fluids commingled with produced water, and some discharged categorized as miscellaneous. When the new EPA Region 4 general permit is noticed to the public, federal agencies and other stakeholders, the new changes and conditions in the permit should be considered by the BOEM when discussing NPDES issues in the FSEIS for lease sale 247 and other future BOEMS EISs.

## WELL STIMULATION

The EPA notes that Section 3.1.1.3 includes information on the use of well stimulation fluids (i.e., “fracking fluids”) as a part of the well completion process. The EPA also understands that the potential for impacting benthic environments and surrounding water columns from the use of well stimulation fluids is not clearly understood. The EPA also understands that the BOEM and the Bureau of Safety and Environmental Enforcement (BSEE) published an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with the use of well stimulation treatments for offshore oil development off the coast of Southern California. With the understanding that geologic formations off Southern California and the GOM are very different, the EPA believes that well stimulation treatment information covered in this EA may be relevant to this proposed action and should be discussed in FSEIS.

**Recommendation:** The EPA recommends that the BOEM consider any new relevant information covered in the BSEE/BOEM EA described above and supplement the well stimulation discussion in the FSEIS. The EPA notes more extensive discussion in the DSEIS related to the use of well stimulation fluids and historically provided. However, the EPA recommends that the BOEM provide more specifics related to how many wells (covered by the proposed action – 247) are expected to receive this type of treatment and a clear description of potential impacts.

## WETLANDS AND COASTAL AREAS

Coastal wetland systems are very sensitive systems that are increasingly stressed from all types of activities including but not limited to coastal development, maintenance dredging of channels, and oil and gas development. These systems are also stressed due to natural events such as hurricanes. Stresses on these systems are only predicted to increase with climate change and sea level rise.

A report by Stedman and Dahl (2008) on the status and trends of wetlands in coastal watersheds states that the “Gulf of Mexico coastal watersheds exhibited substantial losses in freshwater wetlands. This rate of loss was 6 times higher than the rate of freshwater vegetated wetlands losses in the Atlantic coastal watersheds. The estimated losses for all wetland types in the Gulf of Mexico were 25 times higher than those estimates for the Atlantic over the course of this study”.<sup>3</sup> This report also indicates that coastal areas along the panhandle of Florida, Alabama, Mississippi, Louisiana, and Texas are listed as areas of greatest coastal wetland loss in the Gulf of Mexico and that a “majority of the coastal wetland loss (61,800 acres per year) from 1998 to 2004 occurred in the Gulf of Mexico.”

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<sup>3</sup> Stedman, S. and T.E. Dahl. 2008. Status and trends of wetlands in the coastal watersheds of the Eastern United States 1998 to 2004. National Oceanic and Atmospheric Administration, National Marine Fisheries Service and U.S. Department of the Interior, Fish and Wildlife Service. (32 pages)



The EPA also notes that the State of Louisiana has also expressed concerns about impacts to coastal wetland systems and has recommended to the BOEM to quantify all secondary, indirect, and cumulative losses to their coastal zone from offshore energy development and a compensatory mitigation for these losses.

**Recommendation:** The EPA notes the BOEM's efforts to better quantify historical wetland losses for coastal areas in the CPA and the current status of these systems. As the EPA has expressed in several previous NEPA comment letters, we remain concerned about the potential for cumulative impacts on near shore wetlands and coastal areas.

## **ENVIRONMENTAL JUSTICE (EJ)**

The federal action proposed under this DSEIS has the potential to impact EJ communities, both negatively and positively. The potential negative impacts on EJ communities involve oil spills that negatively impact communities that rely on commercial and recreational fishing, oystering, and subsistence fishing. Other negative impacts are associated with the oil-related infrastructure and its impact on minority and low-income communities. The infrastructure support system for oil and gas related industries in the GOM is highly developed, widespread, and has operated for decades within a heterogeneous GOM population. The potential positive impacts associated with the proposed action include increases in economic activity and job creation in these same communities. The EPA generally supports the efforts made by the BOEM to conduct subsistence research in an effort to document the potential impact on these communities.

**Recommendation:** In a response dated February 12, 2016, to our comments on a previous EIS, the BOEM provided an update on the "Subsistence in Coastal Louisiana: An Exploratory Study." Based on the response, the EPA understands that the study has not been made publically available. The EPA recommends that when the report becomes available, the data and full report should be discussed in future lease sale EISs and made available to the public.

## **NATIONAL PARK SERVICE CONCERNS**

The EPA notes that the National Park Service (NPS) is a cooperating agency on this EIS and has provided comments prior to the release of the DSEIS. The NPS expressed concerns about impacts to the Gulf Islands National Seashore (GUIS) recommended placing limitations and/or exclusions on lease sales within a certain distance from the GUIS. In addition, the NPS requested more studies and evaluation of oil and gas activities on the GUIS.

**Recommendation:** The EPA notes that the BOEM refers the reader to Chapter 5.12 of the CPA 241/247 and EPA 226 Supplemental EIS (page 2-7) for BOEM's response to the NPS. The EPA reviewed this previous EIS and notes that Chapter 5.12 is not included. However, the EPA notes BOEM's response to visual impacts to the GUIS on page 4-82 of this DSEIS. In addition, the EPA notes that the other NPS concerns such as subsidence of barrier islands, impacts to natural resources at the islands, impacts to the wilderness character of the islands, etc (page 5-4 and 5-5) were not specifically addressed in this EIS. The EPA recommends BOEM consider providing specific responses to all of the NPS concerns in the FSEIS for this proposed action.

